

Appl. No. 10/019,832  
Amdt. dated January 28, 2004  
Reply to Office Action of October 31, 2003

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

Claim 1. (currently amended) An isolated nucleic acid molecule comprising consisting of nucleotides 36-1171 of the nucleotide sequence of SEQ ID NO: 1 or a fragment of at least 15 nucleotides thereof.

Claim 2. (cancel)

Claim 3. (cancel)

Claim 4. (currently amended) A method for detecting the a nucleic acid molecule of claim 1 comprising nucleotides 36-1171 of SEQ ID NO:1, comprising:

(a) a step of

(i) hybridizing a probe comprising at least 15 nucleotides of nucleotides 36-1171 of SEQ ID NO:1 to a nucleic acid molecule to be detected; or

(ii) amplifying a nucleic acid molecule to be detected using a primer comprising at least 15 nucleotides of nucleotides 36-1171 of SEQ ID NO:1, and

(b) detecting the hybridization or amplification, wherein said method uses DNA that hybridizes to SEQ ID NO:1.

Claim 5. (currently amended) A method for testing for an allergic disease a cedar pollen allergy, said method comprising the steps of:

(a) preparing T cells from a subject,

(b) preparing an RNA sample from said T cells,

(c) conducting hybridization with said RNA sample using the DNA of claim 3 a nucleic acid that specifically hybridizes to nucleotides 36-1171 of SEQ ID NO:1 as a probe,

wherein said ~~DNA~~ probe is labeled, and

(d) measuring the amount of RNA that is derived from said subject and that hybridizes with said ~~DNA~~ probe and comparing said amount with the amount of RNA of a control (normal group) group which has a normal level of cedar pollen specific IgE, wherein if the amount of gene 513 RNA is significantly higher in a sample from the subject than in the control group, then the subject is determined to have a cedar pollen allergy.

Claim 6. (currently amended) A method for testing for ~~an allergic disease~~ a cedar pollen allergy, said method comprising the steps of:

(a) preparing T cells from a subject,  
(b) preparing an RNA sample from said T cells,  
(c) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,  
(d) conducting polymerase chain reaction (PCR) using said cDNA as template and ~~the DNA of claim 3~~ a primer that specifically hybridizes to nucleotides 36-1171 of SEQ ID NO:1 as primer, and

(e) comparing the amount of a DNA amplified by said PCR with a control ~~(normal group)~~ group which has a normal level of cedar pollen specific IgE, wherein if the amount of gene 513 cDNA is significantly higher in a sample from the subject than in the control group, then the subject is determined to have a cedar pollen allergy.

Claim 7. (original) The method of claim 6, wherein said PCR is carried out by a PCR amplification monitoring method.

Claim 8. (previously presented) The method of claim 5, wherein said T cells are prepared from peripheral blood of said subject.

Claim 9. (cancel)

Claim 10. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) administering a test compound to a pollen allergy model animal and stimulating with pollen antigen,
- (b) preparing T cells from said model animal,
- (c) preparing an RNA sample from said T cells,
- (d) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled,
- (e) measuring the amount of RNA that is derived from said T cells and that hybridizes with said DNA, and
- (f) selecting a compound that reduces the amount of said RNA measured in (e), compared to a control (a case where said test compound is not administered).

Claim 11. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) administering a test compound to a pollen allergy model animal and stimulating with pollen antigen,
- (b) preparing T cells from said model animal,
- (c) preparing an RNA sample from said T cells,
- (d) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,
- (e) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and
- (f) selecting a compound that reduces the amount of said DNA amplified in (e), compared to a control (a case where said test compound is not administered).

Claim 12. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) administering a test compound to a pollen allergy model animal,

- (b) preparing lymphocytes from said model animal,
- (c) stimulating said lymphocytes with pollen antigen,
- (d) separating T cells from said lymphocytes stimulated with said antigen,
- (e) preparing an RNA sample from said T cells,
- (f) conducting hybridization with said RNA sample using the DNA that hybridizes to SEQ ID NO:1 as probe, wherein said DNA is labeled,
- (g) measuring the amount of RNA that is derived from said T cells and that hybridizes with said DNA, and
- (h) selecting a compound that reduces the amount of said RNA measured in (g), compared to a control (a case where said test compound is not administered).

Claim 13. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) administering a test compound to a pollen allergy model animal,
- (b) preparing lymphocytes from said model animal,
- (c) stimulating said lymphocytes with pollen antigen;
- (d) separating T cells from said lymphocytes stimulated with said antigen,
- (e) preparing an RNA sample from said T cells,
- (f) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,
- (g) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and
- (h) selecting a compound that reduces the amount of said DNA amplified in (g), compared to a control (a case where said test compound is not administered).

Claim 14. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) preparing lymphocytes from a pollen allergy model animal or from a human having a pollen allergy,

- (b) stimulating said lymphocytes with pollen antigen in the presence of a test compound,
- (c) separating T cells from said lymphocytes stimulated with said antigen,
- (d) preparing an RNA sample from said T cells,
- (e) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled,
- (f) measuring the amount of RNA that is derived from said T cells and that hybridizes with said DNA, and
- (g) selecting a compound that reduces the amount of said RNA measured in (f), compared to a control (a case where said test compound is not administered).

Claim 15. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) preparing lymphocytes from a pollen allergy model animal or from a human having a pollen allergy,
- (b) stimulating said lymphocytes with pollen antigen in the presence of a test compound,
- (c) separating T cells from said lymphocytes stimulated with said antigen,
- (d) preparing an RNA sample from said T cells,
- (e) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,
- (f) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and
- (g) selecting a compound that reduces the amount of said DNA amplified in (f), compared to a control (a case where said test compound is not administered).

Claim 16. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) stimulating a T-cell line with a lymphocyte-stimulating substance in the

presence of a test compound,

(b) preparing an RNA sample from said stimulated T-cell line,

(c) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled,

(d) measuring the amount of RNA that is derived from said T-cell line and that hybridizes with said DNA, and

(e) selecting a compound that reduces the amount of said RNA measured in (d), compared to a control (a case where said test compound is not administered).

Claim 17. (withdrawn) A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

(a) stimulating a T-cell line with a lymphocyte-stimulating substance in the presence of a test compound,

(b) preparing an RNA sample from said stimulated T-cell line,

(c) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,

(d) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and

(e) selecting a compound that reduces the amount of said DNA amplified in (d), compared to a control (a case where said test compound is not administered).

Claim 18. (withdrawn) The method of claim 10, wherein said T cells are prepared from peripheral blood of said pollen allergy model animal.

Claim 19. (withdrawn) The method of claim 12, wherein said lymphocytes are prepared from peripheral blood.

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Claim 20. (withdrawn) The method of claim 10, wherein said allergic disease is a cedar pollen allergy.